

CLAIMS

1. A storage device for storing physical objects between building joists, comprising:
 - a. a storage compartment, having a size that will allow it to fit between two adjacent building joists, and to be rotated through an arc of motion that will be generated when the storage device is raised and lowered while partially supported between two adjacent building joists;
 - b. a supporting shelf for supporting the storage compartment and contents loaded therein, and having first and second edge rails positioned on opposed sides of the supporting shelf;
 - c. at least two first supporting brackets, each designed to be securely affixed to a first building joist, and each capable of supporting a first edge rail of the supporting shelf in a manner that (i) allows the first edge rail to travel across traversable surfaces provided by said first supporting brackets, and (ii) provides a constraining component on each of said first supporting brackets, to prevent the first edge rail from disengaging from the first supporting brackets unless intentionally disengaged by an operator; and,
 - d. at least two second supporting brackets, each designed to be securely affixed to a second building joist, and each capable of supporting a second edge rail of the supporting shelf, in a manner that allows the second edge rail to be disengaged from the second supporting brackets while the first edge rail remains supported by the first supporting brackets.
2. The storage device of Claim 1, wherein the second supporting brackets provide concave support surfaces for the second edge rail.
3. The storage device of Claim 1, wherein the first supporting brackets provide essentially horizontal traversable support surfaces for the first edge rail.
4. The storage device of Claim 1, wherein said supporting shelf has a width of at least about fifteen inches and not greater than about eighteen inches, and wherein said first supporting brackets have traversable surfaces designed to allow at least about 1.5 inches of supported traverse by said first rail.

5. The storage device of Claim 1, wherein said supporting shelf and said first and second supporting brackets are designed to allow the storage device to be mounted and operated, without requiring physical alteration of said supporting shelf or said first or second supporting brackets, between two adjacent building joists having center-to-center spacing within a range of about 15.5 inches to about 17.5 inches.

6. The storage device of Claim 1, also comprising means for affixing the storage compartment to the supporting shelf.

7. The storage device of Claim 1, wherein the first and second supporting brackets are also designed to support a ceiling panel, in a manner that allows the ceiling panel to be affixed to the supporting brackets and subsequently removed from the supporting brackets while the storage device remains between the building joists.

8. A device for storing physical objects between building joists, comprising:

a. at least one supporting shelf having first and second edge rails positioned on opposed sides of the supporting shelf;

b. at least two first supporting brackets, each designed to be securely affixed to a first building joist, and each capable of supporting a first edge rail of the supporting shelf, in a manner that (i) allows the first edge rail to travel across traversable surfaces provided by said first supporting brackets, slide across slidable surfaces provided by said first supporting brackets, and (ii) provides a constraining component on each of said first supporting brackets, to prevent the first edge rail from disengaging from the first supporting brackets unless intentionally disengaged by an operator; and,

c. at least two second supporting brackets, each designed to be securely affixed to a second building joist, and each capable of supporting a second edge rail of the supporting shelf, in a manner that allows the second edge rail to be disengaged from the second supporting brackets while the first edge rail remains supported by the first supporting brackets.

9. The storage device of Claim 8, wherein the second supporting brackets provide concave support surfaces for the second edge rail.

10. The storage device of Claim 8, wherein the first supporting brackets provide essentially horizontal slidable support surfaces for the first edge rail.

11. The storage device of Claim 8, wherein said supporting shelf has a width of at least about fifteen inches and not greater than about eighteen inches, and wherein said first supporting brackets have slidable surfaces designed to allow at least about 1.5 inches of slidable motion by said first rail, after the storage device has been secured to building joists.

12. The storage device of Claim 8, wherein said supporting shelf and said first and second supporting brackets are designed to allow the storage device to be mounted and operated, without requiring physical alteration of said supporting shelf or said first or second supporting brackets, between any two adjacent building joists having center-to-center spacing within a range of about 15.5 inches to about 17.5 inches.

13. The storage device of Claim 8, wherein the first and second supporting brackets are also designed to support a ceiling panel, in a manner that allows the ceiling panel to be affixed to the supporting brackets and subsequently removed from the supporting brackets while the storage device remains between the building joists.

14. A device for storing physical objects between building joists, comprising:
- a. at least one supporting shelf having first and second edge rails positioned on opposed sides of the supporting shelf;
 - b. at least one first supporting bracket capable of supporting a first edge rail of the supporting shelf in a manner that allows the first edge rail to traverse a portion of said first supporting bracket, and,
 - c. at least one second supporting bracket capable of supporting a second edge rail of the supporting shelf in a manner that allows the second edge rail to be disengaged from the second

supporting bracket while the first edge rail remains supported by the first supporting bracket,

wherein said first and second supporting brackets are designed to allow the storage device to be mounted and operated, without requiring physical alteration of said supporting shelf or said first or second supporting brackets, between two adjacent building joists having center-to-center spacing within a range of about 15.5 inches to about 17.5 inches.

15. The storage device of Claim 14, wherein the first supporting brackets constrain the first edge rail from disengaging from the first supporting brackets, unless intentionally disengaged by an operator.

16. The storage device of Claim 14, also comprising at least one storage compartment affixed to at least one supporting shelf.

17. The storage device of Claim 14, wherein the first and second supporting brackets are also designed to support a ceiling panel, in a manner that will allow the ceiling panel to be affixed to the supporting brackets and subsequently removed from the supporting brackets while the storage device remains between the building joists.